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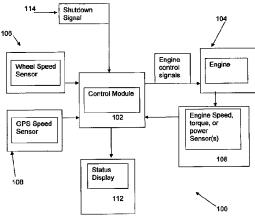
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#### Declarations under Rule 4.17:

 as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

[Continued on next page]

(54) Title: IMPROVED VEHICLE STOPPING SYSTEM AND METHOD



(57) Abstract: A method of controlling a vehicle includes reducing a speed of the vehicle in response to a vehicle shutdown signal, monitoring at least one of a speed of the vehicle and a torque of an engine of the vehicle, determining whether the monitored at least one of the speed and torque is decreasing, if the monitored at least one of the speed and torque is not decreasing, enabling the engine of the vehicle to operate at a reduced power level, and stopping the vehicle when the monitored at least one of the speed and torque has reached a predetermined level. A control system for a vehicle includes a processor that reduces a speed of the vehicle in response to a vehicle includes a processor monitors at least one of a speed of the vehicle and a torture of an engine of the vehicle and determines whether the monitored at least one of the speed and torque is decreasing. If the monitored at least one of the speed and torque is not decreasing, the processor enables the engine of the vehicle to operate at a reduced power level. The processor causes the vehicle to stop the vehicle when the monitored at least one of the speed and torque has reached a predetermined level. In addition, a computer-readable containing a computer program for controlling a vehicle.



VO 2005/074454 A

## WO 2005/074454 A3



 as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

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	UMENTS CONSIDERED TO BE RELEVANT					
Category *	Citation of document, with indication, where a		Relevant to claim No.			
¥.	US 6,459,980 B1 (Tabata ET AL) 01 October 2002 ( summary.	01.10.2002), the background, and the	1-13			
Y	US 2001/0056544 A1 (Walker) 27 December 2001 (	27.12.2001), the abstract.	1-13			
Y	US 2002/0157881 A1 (Bakholdin et pl.) 31 October 2002 (31,10,2002), see the entire document.		1-13			
A,E	US 2005/0125134 A1 (Iwatsuki et al.) 09 June 2005, see the entire document.		1-13			
Y	US 20030225501 A1 (De La Salle et al.) 04 December . 2003 (04,12,2003), see the entire document.		1-13			
Y	US 20010016795 A1 (Bollinger) 23 August 2002 (23	3.08.2001), see the entire document.	1-13			
x	US 6,072,248 A (Muise et al) 29 April 1997 (29.04,1 abstract, column 2 lines 16-26, Figures 2C (refs. 4, 9) lines 53-59; column 2 lines 30-38; and column 5 line	), 4A-4C, claims 5, and 15; column 3	1-13			
Further documents are listed in the continuation of Box C. See patent family annex.						
Special categories of cited documents;  "I" later document published after the international filing date or priority date and not in condited with the application but ofted to understand the particular raterance  "A" document defining the general state of the not considered to be of principle or theory underlying the invention						
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"O" document referring to an oral disclosure, use, exhibited or other means obvious to a person skilled in the art  "F" document published prior to the international flips date but inter than the "th" document member of the same patent family						
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## INTERNATIONAL SEARCH REPORT

tegory *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
Y	US 4,363,999 A (Preikschat) 14 December 1982 (14.12.1982), see the entire document.	1-13
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